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COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, MAY 22, 1998

COMMONWEALTH OF VIRGINIA, ex rel.

STATE CORPORATION COMMISSION

CASE NO. PUC970005

Ex Parte: To determine prices
Bell Atlantic-Virginia, Inc. is
authorized to charge Competitive
Local Exchange Carriers in accordance
with the Telecommunications Act of
1996 and applicable State law

ORDER

A. Background and Procedural History

On November 8, 1996, the Virginia State Corporation Commission (“Commission”) entered an Order Setting Proxy Prices and Resolving Interim Number Portability in Case Nos. PUC960100, PUC960103, PUC960104, PUC960105, and PUC960113 (the “Bell Atlantic-Virginia, Inc. arbitration cases”). In that Order, the Commission adopted interim rates for unbundled elements and interconnection.

As noted in an earlier Order of September 11, 1996, once interim prices had been established, the Commission would open a docket to address a Federal Communications Commission (“FCC”) requirement that a cost model be adopted that would comply with

the Total Element Long Run Incremental Cost (“TELRIC”) pricing method described in 47 C.F.R. §§ 51.505 and 51.511. The FCC’s First Report and Order released August 8, 1996, (“First Order”) in CC Docket No. 96-98, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 F.C.C.R. 15499 (1996), stated that once such a rulemaking proceeding was conducted and a determination of a cost model was made by a state regulatory commission, then the state would be required to replace any interim, or proxy, rates set in an arbitration proceeding with the permanent rates resulting from the rulemaking.¹

By Commission Order of January 14, 1997, the instant proceeding was established to determine the permanent prices that Bell Atlantic-Virginia, Inc. (“BA-VA”) would be allowed to charge competitive local exchange carriers (“CLECs”) for unbundled network elements and interconnection in accordance with the Telecommunications Act of 1996 (“the Act”) and applicable state laws. The Order set out issues to be addressed and requested BA-VA and other interested parties to provide proposals for appropriate pricing methodologies and rates for consideration by the Commission. A schedule was established for workshops, comments, testimony, a Staff Report, and a hearing. After receiving comments from the parties, the Commission entered an Order Prescribing Additional Issues on March 21, 1997.

BA-VA has asked the Commission to determine whether the prices submitted in its Statement of Generally Available Terms and Conditions filed on December 20, 1996,

¹ While these rules were subsequently vacated by the Eighth Circuit’s decision in Iowa Utilities Board v. FCC, 120 F.3d 753 (8th Cir. 1997), the Commission had already implemented interim rates and was committed to replacing them with permanent rates. This proceeding was unaffected by abrogation of the FCC rules because our jurisdiction is founded on §§ 251 and 252, 47 U.S.C. §§ 251 and 252, and applicable Virginia law.

comply with the requirements of § 252(d) of the Act. The Commission declines to make that determination.

A hearing in this matter began on June 9, 1997, and ran for a period of 13 days, concluding on July 30, 1997. The record consists of prefiled testimony by 26 witnesses and Commission Staff, oral testimony by 27 witnesses during the hearings, 2,814 pages of hearing transcript, and 195 exhibits.

At the conclusion of the hearing on July 30, 1997, the Commission ordered that all reserved and outstanding exhibits be filed by August 8, 1997, and that all objections thereto be filed by August 13, 1997, with responses to same being filed by August 18, 1997. Additionally, any corrections to the hearing transcripts were to be filed by August 20, 1997, and briefs were due on or before September 9, 1997.

On July 31, 1997, BA-VA filed Exhibit RLS-190, a reserved exhibit relating to the running of its CapCost+ economic model, regarding the use of a 40-year planning period. On August 13, 1997, the Virginia Cable Telecommunications Association (“VCTA”) filed a Motion to Strike this exhibit, objecting to certain language contained therein. Staff also filed an objection to Exhibit RLS-190 on August 13, 1997, stating that “BA-VA failed to extend the planning period to account for the extra vintages being considered.”² A proprietary printout of the results of running CapCost+ with planning periods of 15, 17, and 40 years was filed with Staff’s letter of objection. After consideration, the Commission will receive RLS-190 into the record in this case along with the three pages of proprietary results attached to Staff’s objection.

² Letter filed by Staff on August 13, 1997, in Case No. PUC970005, DCN 970820137.

Corrections to the transcripts were filed on August 20, 1997, by BA-VA, AT&T Communications of Virginia, Inc. (“AT&T”), MCI Metro Access Transmission Services of Virginia, Inc. (“MCI”), and Staff. Corrections by VCTA and additional corrections by Staff were filed out of time on August 21, 1997. At the Commission’s direction, all parties were afforded an opportunity to take exception to any of the corrections filed. On November 7, 1997, the parties were asked to review all the filed transcript corrections and advise the Commission of any perceived inaccuracies by November 26, 1997. Nothing further has been filed with regard to the transcript corrections. Absent any filed exceptions, the Commission grants BA-VA’s Motion to Correct Transcript and VCTA’s Motion for Leave to File Transcript Corrections Out of Time and accepts all hearing transcript corrections filed on and out of time, making such corrections part of the record herein.

Briefs were filed on September 8, 1997, by the Department of Defense and on September 9, 1997, by BA-VA, AT&T, MCI, Staff, VCTA, MFS Intelenet of Virginia, Inc. (“MFS”), and Teleport Communications Group, Inc. (“TCG”); and these, together with the voluminous record received in this matter, including any issues raised but not specifically addressed in this Order, have been given consideration by the Commission in the decisions set out below.

B. Economic Principles And Selection Of Economic Model

All parties and the Staff of the Commission agreed that the Act requires the use of forward-looking rather than embedded costing methodologies. The principles espoused by Staff and each party’s economic witnesses supported the TELRIC concept adopted by

the FCC in the First Order. Fundamental differences, however, were identified in the application of these principles.

The Commission finds that prices of interconnection and network elements should be based on their total, forward-looking, long-run incremental costs; that the application of these principles should reflect BA-VA's existing wire center locations and the most efficient technology that can reasonably be employed in the immediate future; and that an appropriate allocation of shared costs and common overhead costs, excluding retailing costs, should be included in these costs. The Commission finds that prices based on these costs meet the requirements of the Act.

AT&T/MCI proposed the Hatfield Model, and BA-VA proposed a system of models to apply these principles. The Hatfield Model permits ease of operation, openness, and relies on publicly available data. On the other hand, the BA-VA system, while complex, produces costs for every rate element, whereas the Hatfield Model produces costs for relatively few. Moreover, the BA-VA system relies on data more closely related to actual Virginia operating conditions. We choose to rely on the BA-VA system, with certain modifications, primarily for these practical reasons.³

Model selection is an important issue. The Staff demonstrated, however, that when comparable inputs were used, the two models or systems produced comparable results. This correlation between inputs and results makes the inputs to be used in the model of critical importance. Due to the Hatfield Model's openness and flexibility, it can be run with similar inputs to assure that the BA-VA system is functioning properly and producing reasonable results. We recognize that the BA-VA system of models has

³ To determine the cost for a NID, we choose to rely on the Hatfield Model as recommended by Staff.

inflation and productivity adjustments built in. It need not be altered for those adjustments and, unless otherwise stated below, is not to be altered from the manner in which BA-VA submitted it. We find, however, that the most accurate common overhead factor, for use throughout BA-VA's studies, is the 8.01% recommended by Staff.

C. Recurring Investment-Related Costs

The BA-VA system of models for recurring costs follows a two-step process: first, the investment required for the element is determined; second, the recurring investment-related costs are determined by multiplying that investment by an annual cost factor produced by the CapCost+ model. The Commission finds that the CapCost+ model will produce annual cost factors appropriate for use in all recurring cost computations now required in this proceeding, provided that it is rerun using the input changes below.

(1) We find that the overall, forward-looking cost of capital for BA-VA is 10.12%. Based on the record in this case, this cost of capital is determined using a capital structure of 40% debt and 60% equity, a cost of debt of 7.6%, and a cost of equity of 11.8%.

(2) We adopt the AT&T/MCI-recommended depreciation parameters (Exhibit RBL-78, Attachment 6, Column "FCC VA"), in which Staff concurred, for forward-looking, economic lives and net salvage percentages. These parameters are the best supported and most reasonable data in this proceeding.

(3) We find that the planning period input shall be sufficient to cover the life of all vintages in the study, as recommended by Staff. This means the CapCost+ input for this parameter shall be 40 years. The most accurate annual cost factors will be produced by

ensuring that the CapCost+ levelization process includes the costs for all years in which investment costs are incurred.

(4) We find that the survivor curve input shall specify a rectangular shape. This means the CapCost+ input for this parameter shall specify a “9 curve”. The studies in this proceeding are intended to produce the cost of a single average unit, and this is accomplished by the use of a survivor curve input that avoids forecasting retirements which must be replaced by the introduction of new investment.

(5) We find that the number of vintages to be specified for these studies is five (5). This is a result of the Commission’s synthesis based on the recommendations of the parties and Staff.

(6) We find that the most accurate maintenance factors for use in CapCost+ are those recommended by Staff (Exhibit Staff-173-P, pages 56-57). Staff’s adjustments to the factors used by BA-VA are needed to reflect the most realistic forward-looking situation and to reiterate the Commission’s finding in BA-VA’s arbitration cases.⁴

(7) We find that the most accurate and best supported administration factor for use in CapCost+ is that proposed by BA-VA (Exhibit Staff-173-P, page 57).

(8) We find that the most accurate and best supported shared cost factor for use in CapCost+ is that proposed by BA-VA (Exhibit Staff-173-P, page 57).

(9) We find that the CapCost+ treatment of present values and demand/cost inflation is acceptable; therefore, we decline to adopt the alternative methodologies proposed by VCTA.

⁴ Page 5 of Order Resolving Wholesale Discount for Resold Services entered November 8, 1996, in Case Numbers PUC960100, PUC960103, PUC960104, PUC960105, and PUC960113.

D. Loop Investment Determinations

This section specifies the Commission's findings concerning loop investments. Loop costs shall be determined by incorporating the requirements of Sections B and C above.

(1) BA-VA shall revise as necessary and rerun sufficient of its models to ensure results that incorporate the correct processing of each of the following methods and input numbers.

(2) The ISDN loop investment increment as determined by BA-VA shall be used as is. This is intended to reflect the BA-VA methodology, which determines an ISDN additive on top of a two-wire loop, and includes the use of an 85% fill factor for the ISDN electronics.

(3) The four-wire loop investment shall be determined according to the Staff-recommended methodology (Exhibit Staff-173-P, page 80), i.e., incorporating all Commission modifications to the two-wire loop and including the use of a factor of .89 to adjust average loop length to the length of a four-wire loop.

(4) The DS-1 loop investment as determined by BA-VA shall be used as it stands in this record. This is intended to reflect the BA-VA methodology, which includes the use of an 85% fill factor for the DS-1 electronics.

(5) The cost and price of XDSL (ADSL and HDSL) loops are not part of this proceeding, as determined in the March 21, 1997, Order Prescribing Additional Issues at page 3. The Commission finds that these kinds of loops are not now "network elements," as defined in the Act, because they are not part of any service offered to the general public.

(6) BA-VA's proposed method for loading supporting structure (poles and conduit) investment onto the loop cable investment (Exhibit ERB-27-P, Exhibit 1, page 7) is found to be satisfactory as it stands in this record. There was a failure to propose an alternative to this method, and the Commission accepts the BA-VA method as the only one supported by the record.

(7) The Commission agrees with AT&T/MCI that no cable fill factor, or any other fill factor, should directly or indirectly affect land and buildings investment loadings. BA-VA may use its land and buildings factor as it stands in this record (Exhibit ERB-27-P, Exhibit 1, page 7) to include those investments in loop investments, where such investment is required for housing various loop electronics, but it may not be increased by any fill factor adjustment.

(8) BA-VA shall adhere to the definition and factors immediately below to reflect the investment necessitated by spare loop facilities:

- The definition of fill factor shall be the quotient of dividing total capacity into the amount of capacity in use and assigned for use, with divisor and dividend expressed in the units by which the network element's capacity is measured.
- Distribution cable investment shall reflect a fill factor of 50%. BA-VA shall make the necessary modifications in its model to ensure that its f2/f1 method is overridden, that distribution fill is not multiplied by feeder fill, and that a fill factor of 50% is correctly reflected in this investment.
- Copper feeder cable investment shall reflect a fill factor of 77%.
- Fiber feeder cable investment shall reflect a fill factor of 90%.
- DLC electronics investment shall reflect a fill factor of 85%.

- ISDN loop electronics investment shall reflect a fill factor of 85%.
- DS-1 loop electronics investment shall reflect a fill factor of 85%.

(9) Loop investments shall be determined by using a copper-fiber breakpoint of 9,000 feet.

(10) BA-VA's determination of cable costs shall be recomputed to reflect the TPI correction recommended by both AT&T/MCI (Exhibit MRB-132-P, page 6) and Staff.

(11) NGDLC investment shall be determined as proposed by BA-VA; this is intended to include the estimate of the mix of IDLC and UDLC as proposed by BA-VA.

(12) BA-VA shall use its proposed minimum cable size of 50 pairs in its study reruns. The Commission is aware that smaller cable sizes are sometimes used in the provision of loops, but finds that the effect of this estimate is not sufficient to warrant the complete model overhaul that would be necessitated to reflect smaller cable sizes.

E. Loop Price Groups/NID

(1) Loop prices shall be deaveraged into the three groups proposed by Staff (Exhibit Staff-175, pages 17-19). We find that this arrangement is most closely related to loop costs; and, therefore, it is the best reflection in this record of the Act's requirement to base network element prices on costs.

(2) We adopt the Staff's recommended methodology for determining the price of a NID (Exhibit Staff-173-P, page 82). Staff shall determine the NID price using applicable inputs set forth in this Order.

F. End Office Switching Investment and Rate Structure

This section specifies the Commission's findings concerning end office switching investment. End office switching costs shall be determined by incorporating the requirements of Sections B and C above.

(1) BA-VA shall rerun sufficient of its models to ensure the correct processing of each of the following methods and input numbers. The final prices for these elements shall reflect the Commission's findings on all factors involved in the price computations.

(2) Port investments, for each type of port, shall be the same as determined by BA-VA and as it stands in this record. There shall be a separate price for each type of port as proposed by BA-VA (Exhibit RWW-35, Exhibit A, page 3). We find that the cost-based pricing specified in the Act requires these separate prices because the costs are significantly different.

(3) The usage rate for end-office switching shall be a per-minute structure and shall include the 26 vertical features currently offered by BA-VA. The usage investment shall be as proposed by BA-VA and include the currently offered 26 vertical features. We find that a proper application of the Act's definition of a network element requires the end-office switching element to include only these features.

(4) Switching equipment price discounts shall reflect a mix of 85% replacement, 15% add-on equipment purchases. We find that this mix is the best available incorporation of the necessary forward-looking technique appropriate for this proceeding.

(5) Land and buildings investment loadings shall be computed by using the BA-VA-proposed factor as it stands in this record. No party proposed an alternative factor,

but the Commission finds that land and building investment loadings are necessary, and BA-VA's factor is the only one supported in this record.

(6) Vertical features investment shall reflect the presence of the 26 features currently offered by BA-VA. Henceforth, before BA-VA will be permitted to offer any new vertical feature(s) to any customer, general public or carrier, it will be required to file a price for such feature(s), developed consistent with this Order, and notify all certificated CLECs 30 days in advance of the offering. In the event that a CLEC requests a new vertical feature before BA-VA plans to offer it, such request shall be treated as a new negotiation under the Act.

(7) Investment required for custom routing shall be the same as that underlying the Staff-proposed prices (Exhibit Staff-175, page 29). We find that this approach is the best available incorporation of the forward-looking approach appropriate in this proceeding.

(8) The End Office switching rate structure shall reflect separate prices for originating traffic and terminating traffic, as proposed by BA-VA (Exhibit RWW-35, Exhibit A, page 3). We find that the cost-based pricing specified in the Act requires such a pricing structure because originating and terminating costs are significantly different.

(9) The Local Call Termination rate structure shall reflect per-minute rates for traffic terminating in the BA-VA local calling areas. To be consistent with § 251(g) of the Act, we find that flat-rate, LATA-wide rates are not appropriate.

(10) Application of the local call termination rates shall remain the same as the Commission determined in the BA-VA arbitration cases.

G. Transport Rate Structure and Rate Determination

This section specifies the Commission's findings concerning transport and tandem switching investments. Transport and tandem switching costs shall be determined by incorporating the requirements of Sections B and C above.

(1) BA-VA shall revise as necessary and rerun sufficient of its models to ensure the correct incorporation of each of the following rate structure and rate determination principles. The final prices for these elements shall reflect the Commission's findings on all factors involved in the price computations.

(2) The common transport price shall not be distance sensitive but shall be determined with a per-minute structure to reflect the average distance covered by the transmission.

(3) Dedicated transport prices shall not be distance sensitive but shall consist of the transport facility separate from the terminal elements (e.g., multiplexing, digital cross connect, etc.). This definition is adopted to comply with the Act's requirement that network elements be unbundled at "technically feasible" points (47 U.S.C. § 251(c)(3)).

(4) Common transport shall be defined as transport that is shared by more than one carrier, regardless of whether a tandem switch is involved. Common transport may exist between end offices.

(5) A tandem switching rate shall be applied only when a tandem switch is involved in the transport. The Commission finds that there is no need for a tandem switched transport rate.

(6) Entrance facilities and digital cross-connect functions shall be defined as separate rate elements, consistent with the BA-VA studies, to comply with § 251(c)(3) of the Act, as discussed in (3), above.

(7) “Local” call termination shall be defined as involving local traffic terminating in BA-VA’s local calling areas, not LATA-wide areas. The Commission finds that this is necessary to be consistent with § 251(g) of the Act (47 U.S.C. § 251(g)).

H. Other Network Elements

(1) Signaling and Databases, Operator Services (including Directory Assistance), and Operations Support Systems - Even though no substantiation was given by BA-VA for its models and pricing of elements in these areas, the Commission, lacking an alternative proposal by the other parties, finds that BA-VA’s methodology, together with the Commission’s requirements in Sections B and C above, shall be used to determine these prices.

(2) Daily Usage File (“DUF”) - All DUF charges shall be calculated as recurring because they are related to capital costs. Therefore, BA-VA shall recalculate these charges, using the Commission’s requirements in Sections B and C above.

(3) LIDB (Line Information Database) and Direct Access - BA-VA’s methodology with the Commission’s requirements in Sections B and C above shall be used to determine these prices.

I. Collocation

(1) BA-VA’s collocation tariff rates, filed in this case on March 26, 1997, shall be applicable in this case, except as noted below, because no sufficient alternative was offered. The Commission finds that BA-VA’s cost support for these rates is insufficient to

determine whether these rates are based on total, forward-looking, long-run, incremental costs.

(2) Based on Staff's recommendation, the recurring prices for collocation elements (Exhibit Staff-175, pages 8-9) shall be recomputed by first reducing the BA-VA determined costs by 30%, then adding common overhead costs by using the Staff's recommended 8.01% loading factor.

(3) BA-VA shall permit collocators to provide their own physical collocation infrastructure through subcontractors, in accordance with the FCC's Rules (47 C.F.R. § 51.323(j)). BA-VA shall revise its collocation tariff to incorporate this requirement.

(4) BA-VA's proposed prices for Cage Construction, Room Construction, AC Outlets, and Overhead Lighting that it supplies are acceptable because collocators shall be permitted to self-provide these elements, according to (3), above.

(5) BA-VA's proposed prices for Cable Racking, Cable Installation, and Virtual Collocation shall be applicable in this case because no other party presented evidence sufficient to alter BA-VA's estimates.

J. Interim Number Portability

BA-VA was the only party to submit a cost study methodology for Interim Number Portability. The Commission, lacking an alternative proposal by the other parties, adopts the Staff's modification of BA-VA's methodology found in the Staff Brief filed on September 9, 1997, at page 76. BA-VA shall recalculate the rate with and without transport, using investment proposed by BA-VA and the Commission's prescribed common inputs (Sections B and C above). The INP service order charge shall be recomputed to conform to Section K below.

Parties may submit comments concerning the appropriate cost recovery mechanism to be used to recover INP costs among ILECs and CLECs on or before July 6, 1998. Unless the comments convincingly indicate a need for an industry task force on recovery, the Commission may dispense with such a task force and fashion a cost recovery mechanism.

K. Non-Recurring Charges

There is a lack of comprehensive support for many of BA-VA's proposed prices, but the Commission notes that no other party offered better-supported alternatives for these prices. BA-VA shall recompute its non-recurring charges incorporating the revisions specified below and the 8.01% common overhead loading specified elsewhere in this Order.

(1) BA-VA shall recompute all of its labor rate and levelization determinations to incorporate the Staff's recommendation to apply a productivity adjustment in year one of the data projections, using the Commission's overall cost of capital of 10.12% as the discount rate. These changes shall also apply to the non-recurring charges associated with the collocation elements set forth in Exhibit Staff-175 at pages 8-9.

(2) BA-VA shall recompute its service order costs by adopting the Staff's recommended projections of percent manual effort, which are 100%, 70%, 45%, 25%, and 5%, beginning with year 1 and continuing through year 5.

(3) BA-VA shall recompute its installation costs and coordinated cutover with inputs modified as follows:

- The work time labeled “assignment” shall be eliminated because the Commission finds that CLECs will be able to perform this activity for themselves.
- The work time labeled “locate terminal” shall be eliminated from premises visit costs because the Commission finds that travel time should cover this activity.
- The work time for “dispatch and closeout” shall be reduced by half because the Commission finds that the use of craft access terminals should permit such a reduction.
- The work time labeled “frame attendant” shall be eliminated because the Commission finds that this activity is covered by CSC maintenance.
- The work time labeled “RCMAC” shall be eliminated because the Commission finds that this activity is not attributable to CLECs, but it is caused by the presence of retail customers in general.

(4) All costs associated with disconnect activities shall be separated from connect costs and used to create new disconnect charges for the same elements as Staff recommended (Exhibit Staff-173-P, p. 144, including the ISDN PRI port and the DID port). This also applies to the Intellimux elements for DS-0 and DS-1 (Exhibit Staff-175, p. 6).

(5) The Commission declines to require the audit and true-up procedure recommended by Staff.

(6) The Commission finds that the cost of an initial directory listing is covered by other network elements, and no charge shall be applied to an initial directory listing; however, additional (tariffed) directory listings are not network elements as defined by

§ 153(29) of the Act. Such additional listings shall be provided to requesting carriers at the tariff rate less BA-VA's wholesale discount.

(7) The Commission has considered and rejected MFS's proposal to eliminate the price of customer-specified signaling.

L. Miscellaneous

Finally, an issue was raised by AT&T in its Brief at page 157 regarding provisions in BA-VA's collocation tariff "that could work to impose unnecessary costs upon collocators." This case deals only with pricing, and the Commission will consider the issue raised by AT&T in another docket.

ACCORDINGLY, IT IS THEREFORE ORDERED THAT:

(1) BA-VA shall re-run its cost studies using the criteria and directives set out above and furnish the results and accompanying work papers on loops, switching, and transport to the Commission, Staff, and all parties on or before June 8, 1998. The results and accompanying work papers relating to the re-run cost studies for all other elements shall be furnished to the same group listed above on or before June 22, 1998.

(2) Staff shall determine the price of a NID using applicable inputs set forth in this Order and furnish the results and accompanying work papers to the Commission and all parties on or before June 22, 1998.

(3) Parties shall file an original and fifteen (15) copies of comments relating to BA-VA's results and the Staff's NID price by July 6, 1998.

(4) Staff shall evaluate the re-run cost studies and report its findings to the Commission by July 21, 1998.

(5) With regard to Interim Number Portability, comments shall be allowed as set out above.

THERE BEING NOTHING FURTHER to come before the Commission at this time regarding this matter, this case shall be continued generally.